

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : Hongyun Chen et al.  
Application No. : 10-090,453  
Filed : March 4, 2002  
For : NOVEL ABCA6 TRANSPORTER AND USES THEREOF

Art Unit : 1645  
Docket No. : 100103.404  
Date : September 6, 2002

Commissioner for Patents  
Washington, DC 20231

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents:

In accordance with 37 C.F.R. §§ 1.56 and 1.97 through 1.98, applicants wish to make known to the Patent and Trademark Office the references set forth on the attached form PTO-1449 (copies of the cited references are enclosed).

As to any reference supplied, applicants do not admit that it is "prior art" under 35 U.S.C. §§ 102 or 103, and specifically reserve the right to traverse or antedate any such reference, as by a showing under 37 C.F.R. § 1.131 or other method. Although the aforesaid references are made known to the Patent and Trademark Office in compliance with applicants' duty to disclose all information they are aware of which is believed relevant to the examination of the above-identified application, applicants believe that their invention is patentable.

Please acknowledge receipt of this Information Disclosure Statement and kindly make the cited references of record in the above-identified application.

Respectfully submitted,

Hongyun Chen et al.

Seed Intellectual Property Law Group PLLC



William T. Christiansen, Ph.D.

Registration No. 44,614

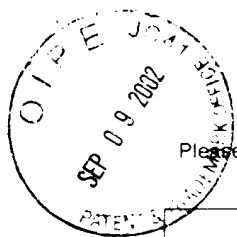
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Enclosures:

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Form PTO/SB/21  
Forms PTO-1449 (2 Sheets)  
Cited References (26)

701 Fifth Avenue, Suite 6300  
Seattle, Washington 98104-7092  
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Fax: (206) 682-6031

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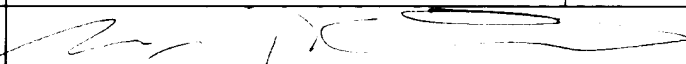
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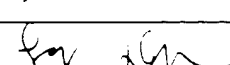
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<b>TRANSMITTAL FORM</b>  (To be used for all correspondence after initial filing)	Application Number	10/090,453
	Filing Date	March 4, 2002
	First Named Inventor	Hongyun Chen
	Group Art Unit	1645
	Examiner Name	
	Attorney Docket No.	100103.404

ENCLOSURES (check all that apply)		
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SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT		
Individual Name	William T. Christiansen, Ph.D. Reg. No. 44,614	 <b>00500</b> PATENT TRADEMARK OFFICE
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Date	September 6, 2002	

CERTIFICATE OF MAILING		
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, Washington, D.C. 20231 on the date specified below.		
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FORM PTO-1449  
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PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.  
100103.404APPLICATION NO.  
10 090,453

## INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

APPLICANT  
Hongyun Chen et al.FILING DATE  
March 4, 2002GROUP PART UNIT  
1645

## U.S. PATENT DOCUMENTS

*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
AA						

## FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	TRANSLATION	
				YES	NO
AB	WO 98/48784	11/05/98	WIPO		

## OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

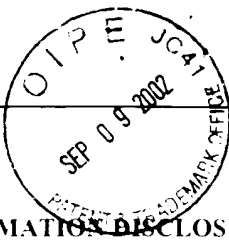
AC	Allikmets et al., "Mutation of the Stargardt disease gene ( <i>ABCR</i> ) in age-related macular degeneration," <i>Science</i> 277(5333):1805-1807, September 19, 1997.
AD	Ambudkar et al., "Biochemical, cellular, and pharmacological aspects of the multidrug transporter," <i>Annu. Rev. Pharmacol. Toxicol.</i> 39:361-398, 1999.
AE	Bodzioch et al., "The gene encoding ATP-binding cassette transporter 1 is mutated in Tangier disease," <i>Nature Genetics</i> 22:347-351, August 1999.
AF	Boer et al., "Modulation of P-glycoprotein mediated drug accumulation in multidrug resistant CCRF VCR-1000 cells by chemosensitisers," <i>European Journal of Cancer</i> 32A(5):857-861, May 1996.
AG	Borst, "Introduction: Multidrug resistant proteins," <i>Seminar in Cancer Biology</i> 8(3):131-134, June 1997.
AH	Brooks-Wilson et al., "Mutations in <i>ABCI</i> in Tangier disease and familial high-density lipoprotein deficiency," <i>Nature Genetics</i> 22(4):336-345, August 1999.
AI	Connop et al., "Novel Effects of FCCP [Carbonyl Cyanide <i>p</i> -(Trifluoromethoxy)phenylhydrazone] on Amyloid Precursor Protein Processing," <i>J. Neurochem.</i> 72(4):1457-1465, April 1999.
AJ	Games et al., "Alzheimer-type neuropathology in transgenic mice overexpressing V717F $\beta$ -amyloid precursor protein," <i>Nature</i> 373(6514):523-527, February 9, 1995.
AK	Goate et al., "Segregation of a missense mutation in the amyloid precursor protein gene with familial Alzheimer's disease," <i>Nature</i> 349(6311):704-706, February 21, 1991.
AL	Hamon et al., "Interleukin-1 $\beta$ secretion is impaired by inhibitors of the Atp binding cassette transporter, <i>ABC1</i> ," <i>Blood</i> 90(8):2911-2915, October 15, 1997.
AM	Hardy and Gwinn-Hardy, "Genetic classification of primary neurodegenerative disease," <i>Science</i> 282(5391):1075-1079, November 6, 1998.
AN	Higgins, "The ABC of Channel Regulation," <i>Cell</i> 82(5):693-696, September 8, 1995.
AO	Higgins, "Volume-activated chloride currents associated with the multidrug resistance P-glycoprotein," <i>J. Physiol.</i> 482:31S-36S, January 1995.

EXAMINER

DATE CONSIDERED

\* EXAMINER: Initial if reference considered, whether or not criteria is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant(s).

FORM PTO-1449  
(REV. 7-80)



U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICE

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BA						

## FOREIGN PATENT DOCUMENTS

DOCUMENT NUMBER	DATE	COUNTRY	TRANSLATION
			YES NO
BB			

## OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

BC	Ling, "Multidrug resistance: molecular mechanisms and clinical relevance," <i>Cancer Chemother. Pharmacol.</i> 40(Suppl.):S3-S8, 1997.
BD	Mills et al., "Regulation of amyloid precursor protein catabolism involves the mitogen-activated protein kinase signal transduction pathway," <i>J. Neuroscience</i> 17(24):9415-9422, December 15, 1997.
BE	Mosser et al., "Putative X-linked adrenoleukodystrophy gene shares unexpected homology with ABC transporters," <i>Nature</i> 361(6414):726-730, February 25, 1993.
BF	Nakamura et al., "Polymorphisms of the human homologue of the <i>Drosophila</i> white gene are associated with mood and panic disorders," <i>Mol. Psychiatry</i> 4(2):155-162, March 1999.
BG	Patel and Latterich, "The AAA team: related ATPases with diverse functions," <i>Trends Cell Biol</i> 8(2):65-71, February 1998.
BH	Riordin et al., "Identification of the Cystic Fibrosis Gene: Cloning and Characterization of Complementary DNA," <i>Science</i> 245(4922):1066-1073, September 8, 1989.
BI	Rust et al., "Tangier disease is caused by mutations in the gene encoding ATP-binding cassette transporter 1," <i>Nature Genetics</i> 22(4):352-355, August 1999.
BJ	Schinkel et al., "Disruption of the mouse <i>mdr1a</i> P-glycoprotein gene leads to a deficiency in the blood-brain barrier and to increased sensitivity to drugs," <i>Cell</i> 77(4):491-502, May 20, 1994.
BK	Suzuki et al., "An increased percentage of long amyloid $\beta$ protein secreted by familial amyloid $\beta$ protein precursor ( $\beta$ APP <sub>717</sub> ) mutants," <i>Science</i> 264(5163):1336-1340, May 27, 1994.
BL	Thomas et al., "Mutations in the sulfonylurea receptor gene in familial persistent hyperinsulinemic hypoglycemia of infancy," <i>Science</i> 268(5209):426-429, April 21, 1995.
BM	Wolozin and Behl, "Mechanisms of Neurodegenerative Disorders: Part I: Protein Aggregates," <i>Arch. Neurol.</i> 57(6):793-796, June 2000.
BN	Zagotta and Siegelbaum, "Structure and function of cyclic nucleotide-gated channels," <i>Annual Rev. Neurosci.</i> 19:235-263, 1996.

EXAMINER	DATE CONSIDERED
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